



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,231	03/10/2004	Richard Hammond	ASC-057C1	2980
51414 7590 03/26/2009 GOODWIN PROCTER LLP PATENT ADMINISTRATOR 53 STATE STREET EXCHANGE PLACE BOSTON, MA 02109-2881				
EXAMINER GHYKA, ALEXANDER G				
ART UNIT 2812		PAPER NUMBER		
NOTIFICATION DATE 03/26/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentBos@goodwinprocter.com
hmcpeake@goodwinprocter.com
glenn.williams@goodwinprocter.com

Advisory Action
Before the Filing of an Appeal Brief

Application No.

10/797,231

Applicant(s)

HAMMOND ET AL.

Examiner

ALEXANDER G. GHYKA

Art Unit

2812

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 March 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/Alexander G. Ghyska/
Primary Examiner, Art Unit 2812

Continuation of 11, does NOT place the application in condition for allowance because: Applicants argue that while Hellberg does disclose the fact that SiGe may be oxidized, the Examiner does not explain the basis for his contention that this is a "known benefit" justifying an obviousness rejection. Applicants argue that one of skill in the art would not combine the oxidation process of Hellberg with Ismail and Chang, because Hellberg's process is more time consuming than Chang's chemical etching and results in deleterious interdiffusion and Ge contamination. The Examiner maintains that one of ordinary skill in the art would recognize that different oxidation processes would have different pros and cons, and maintains that the use of a known oxidation process for its benefit of oxidation would have been obvious to one of ordinary skill in the art. Applicants argue that one of ordinary skill in the art, wishing to remove SiGe, would clearly prefer the faster method of Chang, particularly since Hellberg's method also involves temperatures vastly higher than Chang's temperatures. The Examiner maintains that even though one method is faster than another, the use of a known method for its known benefit does not constitute a patentable difference. Applicants further argue that the Ge interdiffusion would make the device inoperable. The Examiner maintains that there is no evidence of record which shows the device to be inoperable.

With respect to Claim 43, Applicants argue that the Examiner again ignores the fact that Ismail himself teaches against the formation of a MOSFET, and ignores the fact that Ismail discloses that the MOSFET is an inferior device. The Examiner maintains that the fact that the MOSFET is an unpreferred embodiment does not constitute a patentable difference.

With respect to Claim 45, Applicants argue that while Ismail does disclose a surface channel device and a buried channel device in Claim 7, these devices have channels in different layers of Ismail's structure, whereas the present claim requires that both channels are disposed in a single semiconductor layer. The Examiner notes that in Figure 7, the strained semiconductor layer comprises portions of the two channel areas.

With respect to Claims 41 and 43, Applicants argue that Ismail teaches against using the MOSFET. The Examiner maintains that the use of an unpreferred device does not constitute a patentable difference and maintains that the cited prior art suggests the interchangeability of MOSFETs and MODFETs. With respect to Claims 42, 44, 46-54 and 56-73, Applicants again argue the inferior electrical performance of the MOSFET. The Examiner maintains for the reasons as discussed above.

With respect to Claim 60, Applicants argue that one of ordinary skill in the art could not simply remove this layer (the SiGe layer partially missing in Fig. 7 is required- it is this layer that functions as the channel of his P-MODFET device) and then fabricate a device having p-type doped source and drain regions, as the SiGe channel layer, from which this device derives its enhanced performance would be missing. The Examiner notes that the SiGe layer is selectively removed from the N-MODFET.

/Alexander G. Ghyska/

PRIMARY EXAMINER AU 2812